THOUGHTS RELATED TO THE LANDSCAPE VEGETATION ANALYSIS ON THE MEDICINE BOW NATIONAL FOREST, WYOMING

My name is Dr. Dan Tinker and I am a forest and fire ecologist, employed as an Associate Professor at the University of Wyoming. I was a member of the Governor's Forest Task Force two years ago and have worked and conducted research in the MBNF for over two decades. I would like to provide my perspective on the proposed LaVA project, as outlined in the scoping document. My opinions and thoughts are my own, and do not reflect any official position of the University of Wyoming.

While the bark beetle epidemic that has occurred over the past decade or so is unprecedented in geographic extent, at least in recent recorded history, the impacts to forests at the stand and watershed level have been documented numerous times throughout the Intermountain West's montane forests. Overstory mortality has been considerably less than predicted across the landscape, although some stands have experienced high levels of tree death. Studies of forest recovery from Wyoming and other states in the region have suggested that recovery of forest structure and function – largely through surviving overstory trees and "advance regeneration" of smaller understory trees – is already occurring, much of it in the absence of any active forest management treatments. Below, I will address a few specific areas that I think are important to consider more fully.

1. Health and human safety are the most important issues in all of this. Removal of hazard trees and dangerous areas of forest around human settlements, trails, roads, campgrounds, etc. is absolutely appropriate and necessary. I believe this has been the focus of tree removal to date, and I applaud those involved with this process.
2. The goal of "restoring resilience" to the forests is commendable, but concepts of resilience are complex, at best. Resilience, by definition, refers to a forest returning to the pre-disturbance condition after some period of recovery, whether natural or assisted by humans. Recent evidence shows that these forests are inherently resilient to these types of disturbances, which, along with high-intensity fires, they have evolved with for thousands of years.
3. The promotion of "age class, structural, and vegetative diversity" across the landscape, as outlined in the Purpose portion of the LaVA document, is already occurring in the absence of any treatments. The advance regeneration mentioned above, along with the survival of all understory vegetation and many mature canopy trees, is creating a new forest stand that will be composed of a broad range of tree ages and sizes, and in some cases, the dominant tree species in some stands may change from primarily lodgepole pine, to other species such as subalpine fir or even aspen.
4. Understory vegetation is relatively untouched by the bark beetle epidemic, and in some cases, graminoid species may increase in abundance, providing improved wildlife habitat, again in the absence of any treatments.
5. Using harvest and burning to "accelerate recovery and regeneration" is not accurate. In fact, removing living canopy and understory trees by either method will actually delay these processes, which are already occurring. Understory tree growth has increased three-fold (based on recent data from MBNF forests) in the absence of treatment.
6. Recovery of usable forest products from the stands is limited, at best. Many of the woody resources that were killed by the bark beetles have since fallen to the ground and begun to decompose, crack, and fragment. Removal of these woody resources requires removal of living, healthy trees.

7. Removing woody fuels in an attempt to reduce the likelihood of large, high-intensity fires is appropriate only in areas around human settlement or adjacent to other non-federal lands. These types of fires have occurred for thousands of years, and even young, regenerating stands may reburn after only a few years if weather conditions are suitable.
8. A more general comment relates to the interpretation or absence of scientific support for much of the proposed activity. In particular, there is clearly no consensus regarding the effectiveness of widespread fuel reductions in an effort to reduce either the occurrence or severity of future fires. Similarly, as mentioned above, many studies have already documented the diversity in forest age and structure that is occurring across the landscape, indicating that intensive treatments may actually decrease, rather than increase species diversity.

I provide these comments respectfully, and would be interested in joining in future discussions related to this, and other similar projects.

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